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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,494	10/15/2004	Hiroshi Mitsuyoshi .	KOY-15743	4591
40854 7590 04/09/2007 RANKIN, HILL, PORTER & CLARK LLP 4080 ERIE STREET WILL OLICHBY, OLI 44004, 7826			EXAMINER	
			HONG, JOHN C	
WILLOUGHBY, OH 44094-7836			ART UNIT	PAPER NUMBER
			3726	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	04/09/2007	PAPED	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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	Application No.	Applicant(s)				
Office Action Summary	10/511,494	MITSUYOSHI ET AL.				
omee Action Summary	Examiner	Art Unit				
The MAN INC DATE of this communication was	JOHN C. HONG	3726				
The MAILING DATE of this communication app Period for Reply	ears on the cover sneet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	l. lely filed the mailing date of this communication.				
Status						
1) Responsive to communication(s) filed on						
_	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims	`					
4) Claim(s) 1 and 2 is/are pending in the application	on.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1 and 2</u> is/are rejected.	6)⊠ Claim(s) <u>1 and 2</u> is/are rejected.					
7) Claim(s) is/are objected to						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner						
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)☐ Some * c)☐ None of:						
. 1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	<b></b>					
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Ll Interview Summary Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10/15/04.	5) Notice of Informal Pa					

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## **DETAILED ACTION**

## **Drawings**

1. Figures 4 and 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP09047887 in view of Merz (US2004/0016121).

Regarding Claim(s) 1, '877 teaches a production method for a circular body whereby a rolled steel plate is cut in given dimensions to form a blank, the blank is roll-formed to cause the cut surfaces on each side to confront each other, the confronted sections are welded to form a cylindrical body, and the cylindrical body is then formed into a circular body of a predetermined shape, comprising the steps of: in the case of confrontation of the cut surfaces on each side, roll-forming the blank in the direction in which the cut surfaces are parallel, then laser-welding the

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cut surfaces (Figs. 1-5; Translation).

'887 fails to teach the step of cutting the rolled steel plate, causing the cut surfaces on each side to incline relative to the thickness direction of the rolled steel plate to reverse the inclination direction of the cut surfaces on each side.

Merz teaches the step of cutting the rolled steel plate, causing the cut surfaces on each side to incline relative to the thickness direction of the rolled steel plate to reverse the inclination direction of the cut surfaces on each side (Fig.1 b); page 2, [0034]-[0035]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the step of cutting the rolled steel plate, causing the cut surfaces on each side to incline relative to the thickness direction of the rolled steel plate to reverse the inclination direction of the cut surfaces on each side, as taught by Merz on the method of '887 so as to butt the end faces against each other without gap.

Regarding claim 2, the limitation of the circular-body is a rim and the angle of inclination of the cut surface is 1 to 3 degrees relative to the thickness direction, It would have been obvious matter of design choice to one of ordinary skill in the art at the time the invention was made to construct the angle of inclination of the cut surface is 1 to 3 degrees relative to the thickness direction, because Applicant has not disclosed that the angle of inclination of the cut surface is 1 to 3 degrees relative to the thickness direction provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the structure of the Merz's cutting angle because it would perform the welding process without any problem.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN C. HONG whose telephone number is 571-272-4529. The examiner can normally be reached on M-F 9:00-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID BRYANT can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ag

JOHN C HONG Primary Examiner Art Unit 3726

jh April 01, 2007